```
=> d his
     (FILE 'HOME' ENTERED AT 12:07:27 ON 25 NOV 2009)
     FILE 'MEDLINE, SCISEARCH, CAPLUS, BIOSIS' ENTERED AT 12:47:57 ON 25 NOV
     2009
L1
          10043 S ENDOTHELIAL PROGENITOR CELLS
L2
          12913 S VASCULAR FUNCTION
L3
           1293 S VASCULAR CONTRACTILITY
L4
            79 S BRACHIAL REACTIVITY
L5
           1372 S L3 OR L4
L6
           148 S L1 AND L2
L7
              1 S L1 AND L5
           107 S L1(L)L2
L8
            48 DUP REM L8 (59 DUPLICATES REMOVED)
L9
L10
            48 FOCUS L9 1-
L11
             0 S L10 AND PY<=2002
L12
             28 S L10 AND NUMBER
L13
              0 S L12 AND L5
              2 S L12 AND FRAMINGHAM
L14
=> d ti so au ab 114 2
L14 ANSWER 2 OF 2
                      MEDLINE on STN
     Circulating endothelial progenitor cells,
     vascular function, and cardiovascular risk.
SO
     The New England journal of medicine, (2003 Feb 13) Vol. 348, No. 7, pp.
     593-600.
     Journal code: 0255562. E-ISSN: 1533-4406.
     Hill Jonathan M; Zalos Gloria; Halcox Julian P J; Schenke William H;
ΑIJ
     Waclawiw Myron A; Quyyumi Arshed A; Finkel Toren
     BACKGROUND: Cardiovascular risk factors contribute to atherogenesis by
AΒ
     inducing endothelial-cell injury and dysfunction. We hypothesized that
     endothelial progenitor cells derived from bone
     marrow have a role in ongoing endothelial repair and that impaired
     mobilization or depletion of these cells contributes to endothelial
     dysfunction and cardiovascular disease progression. METHODS: We measured
     the number of colony-forming units of endothelial
     progenitor cells in peripheral-blood samples from 45 men
     (mean [+/-SE] age, 50+/-2 years). The subjects had various degrees of
     cardiovascular risk but no history of cardiovascular disease.
     Endothelium-dependent and endothelium-independent function was assessed by
     high-resolution ultrasonography of the brachial artery. RESULTS: We
     observed a strong correlation between the number of circulating
     endothelial progenitor cells and the subjects'
     combined Framingham risk factor score (r=-0.47, P=0.001).
     Measurement of flow-mediated brachial-artery reactivity also revealed a
     significant relation between endothelial function and the number
     of progenitor cells (r=0.59, P<0.001). Indeed, the levels of circulating
     endothelial progenitor cells were a better
     predictor of vascular reactivity than was the presence or absence of
     conventional risk factors. In addition, endothelial
     progenitor cells from subjects at high risk for
     cardiovascular events had higher rates of in vitro senescence than cells
     from subjects at low risk. CONCLUSIONS: In healthy men, levels of
```

endothelial progenitor cells may be a surrogate biologic marker for vascular

surrogate biologic marker for **vascular function** and cumulative cardiovascular risk. These findings suggest that endothelial injury in the absence of sufficient circulating progenitor cells may affect the progression of cardiovascular disease. Copyright 2003 Massachusetts Medical Society

=> d ti so au ab pi 110 2

- L10 ANSWER 2 OF 48 CAPLUS COPYRIGHT 2009 ACS on STN
- TI Method for the diagnosis and treatment of vascular disease
- SO PCT Int. Appl., 51 pp. CODEN: PIXXD2

US 20060057072

IN Finkel, Toren; Quyyumi, Arshed A.; Hill, Jonathan M.

A1

AB A method for diagnosing decreased vascular function is disclosed. The method includes assaying the number of endothelial progenitor cells. A method for detecting increased cardiovascular risk is also disclosed, as is a method diagnosing atherosclerosis. In one example, the methods include assaying the number of endothelial progenitor cells. A method for treating a subject with decreased vascular function is disclosed. The method includes administering a therapeutically effective amount of endothelial progenitor cells to the

subject. In one embodiment, the subject has atherosclerosis. KIND DATE APPLICATION NO. DATE PATENT NO. _____ A2 20040603 A3 20041007 20031112 PΙ WO 2004045517 WO 2003-US36317 WO 2004045517 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2003291536 A1 20040615 AU 2003-291536 20031112

20060316 US 2005-534626

20050511

=>